

REMARKS

The Office action dated January 15, 2002 has been carefully considered. Claims 1, 4, 6-13, 15-20, 22, 23, and 25-45 are currently pending in this application and are presented for the Examiner's review and consideration. Claims 1, 4, 6, 7, 10, 13, 15, 16, 19, and 23 have been amended, and new claims 29-45 have been added, to further define the invention.

I. CLAIM REJECTIONS UNDER 35 U.S.C. § 102

Claims 1-6, 8-14, and 18-28 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,780,899 to Roper ("Roper '899"). Independent claim 1, as amended, recites a drum comprising a first indentation configured and dimensioned to resist buckling of the side wall, wherein the indentation extends substantially circumferentially about the side wall and is substantially V-shaped only at the corner sections. This amendment to claim 1 is supported by the application as originally filed, at least at FIGS. 5 and 6, where corner indentations 24 are shown substantially V-shaped only at the corner sections.

Roper '899 does not disclose, teach, or suggest a drum having an indentation that is substantially V-shaped only at the corner sections. Rather, Roper '899 discloses a "smooth rounded concave belt 29 extending around the center of the container." Roper '899, 6:26-32. The belt 29 of Roper '899 does not have a different shape at the corner sections than it does elsewhere. Furthermore, it would not be obvious to modify the container of Roper '899 to have an indentation that is substantially V-shaped only at the corner sections, because Roper '899 states that the smooth rounded concave belt 29 "eliminates the concentration of stresses within the tubular body which would normally occur as a result of sharp bends or corners in the container." *Id.* Thus, applicants respectfully submit that amended claim 1, and its dependent claims 4, 6-9, 29, and 30, are patentable over Roper '899.

Independent claim 10, as amended, recites a side wall comprising a first portion having a plurality of side wall sections that define a first circumferential cross-section, and a second portion comprising angular indentations in the side wall disposed at intersections between the side wall sections defining a second circumferential cross-section that is configured and dimensioned to resist buckling of the side wall, wherein the first cross-section is substantially rectangular, and the second cross-section is

substantially circular. Roper '899 does not disclose, teach, or suggest a drum having a side wall comprising a first portion defining a first circumferential cross-section that is substantially rectangular, and a second portion defining a second circumferential cross-section that is substantially circular. For at least this reason, applicants respectfully submit that amended claim 10, and its dependent claims 11-13, and 15-18, are patentable over Roper '899.

Independent claim 19, as amended, recites a side wall comprising a first portion having a plurality of side wall sections that define a substantially rectangular first cross-section of the side wall, and a protrusion formed in the side wall to resist buckling of the side wall, the protrusion defining a substantially circular second cross-section of the side wall. Roper '899 does not disclose, teach, or suggest a drum having a side wall comprising a first portion that defines a substantially rectangular first cross-section of the side wall, and a protrusion formed in the side wall that defines a substantially circular second cross-section of the side wall. Thus, applicants respectfully submit that claim 19, and its dependent claims 20, 22, 23, 25-28, and 31-33, are patentable over Roper '899.

Claims 1-14, and 18-28 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,586,204 to Roper ("Roper '204"). Claim 1, as amended, recites that the drum defines a longitudinal axis between the end portions, and the indentation extends substantially circumferentially about the side wall around the longitudinal axis, and is substantially V-shaped only at the corner sections. Roper '204 does not disclose, teach, or suggest a drum having an indentation that extends substantially circumferentially about the side wall around the longitudinal axis, and is substantially V-shaped only at the corner sections. In fact, Roper '204 does not disclose, teach, or suggest a drum having any substantially V-shaped indentations at the corner sections at all. Thus, applicants respectfully submit that amended claim 1, and its dependent claims 4, 6-9, 29, and 30, are patentable over Roper '204.

With respect to independent claim 10, as amended, Roper '204 does not disclose, teach, or suggest a drum having a side wall comprising a first portion defining a first circumferential cross-section that is substantially rectangular, and a second portion defining a second circumferential cross-section that is substantially circular, as recited by that claim. Consequently, applicants respectfully submit that amended claim 10, and its dependent claims 11-13, and 15-18, are patentable over Roper '204.

With respect to independent claim 19, as amended, Roper '204 does not disclose, teach, or suggest a drum having a side wall comprising a first portion that defines a substantially rectangular first cross-section of the side wall, and a protrusion formed in the side wall that defines a substantially circular second cross-section of the side wall, as recited by that claim. Consequently, applicants respectfully submit that claim 19, and its dependent claims 20, 22, 23, 25-28, and 31-33, are patentable over Roper '204.

Claims 1-7 were rejected under 35 U.S.C. § 102(b) as being anticipated by EP 0 399 100 A1 to Hagenlocher ("Hagenlocher"). Claim 1, as amended, recites a drum comprising a first indentation configured and dimensioned to resist buckling of the side wall, wherein the indentation extends substantially circumferentially about the side wall and is substantially V-shaped only at the corner sections. Hagenlocher does not disclose, teach, or suggest a drum comprising a first indentation configured and dimensioned to resist buckling of the side wall, wherein the indentation is substantially V-shaped only at the corner sections. Rather, Hagenlocher discloses a container with a plurality of support beams 11 attached to the outside of the walls of the container. Thus, applicants respectfully submit that amended claim 1, and its dependent claims 4, 6-9, 29, and 30, are patentable over Hagenlocher.

II. CLAIM REJECTIONS UNDER 35 U.S.C. § 103

Claims 15-17 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Roper '204 or Roper '899 in view of U.S. Patent No. 3,117,873 to Bartels et al. ("Bartels"). The Examiner stated that it would be "obvious to employ the v shape of Bartels et al. in either container of Roper to provide an alternative indentation." Claims 15-17 depend from independent claim 10, which, as shown above, is patentable over both Roper '204 and Roper '899. Bartels does not remedy the deficiencies of Roper '204 and Roper '899. Furthermore, it would not have been obvious to combine the bead of Bartels with the containers of Roper '204 or Roper '899. The bead of Bartels is intended to *deform* under atmospheric pressure to facilitate *foreshortening* of the can, *see* Bartels '873, 1:34-43, 59-61, 4:11-13, 32-35, 5:74-6:2 (emphasis added), and not to resist buckling of the side wall of the can. For at least these reasons, applicants respectfully submit that claims 15-17 are patentable over Roper '204, Roper '899, and Bartels.

Claims 10-14, and 19-26 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Hagenlocher. The Examiner took official notice that "it is well known to provide fill/drain openings in containers," and stated that "it would have been obvious to employ a fill/drain opening in the container of Hagenlocher so that the container could be rapidly filled or drained." However, the Examiner has not provided any factual evidence showing a suggestion, teaching, or motivation in the prior art to provide a fill/drain opening in the container of Hagenlocher, as is required under the patent laws. *See, e.g., Brown & Williamson Tobacco Corp. v. Philip Morris Inc.*, 229 F.3d 1120, 1124-25, 56 USPQ2d 1456, 1459 (Fed.Cir.2000) ("a showing of a suggestion, teaching, or motivation to combine the prior art references is an essential component of an obviousness holding").

In addition, Hagenlocher does not disclose, teach, or suggest a drum having a side wall comprising a first portion defining a first circumferential cross-section that is substantially rectangular, and a second portion defining a second circumferential cross-section that is substantially circular, as recited by amended claim 10. Nor does Hagenlocher disclose, teach, or suggest a drum having a side wall comprising a first portion that defines a substantially rectangular first cross-section of the side wall, and a protrusion formed in the side wall that defines a substantially circular second cross-section of the side wall, as recited by amended claim 19. Thus, applicants submit that amended claims 10 and 19, and their respective dependent claims, are patentable over Hagenlocher.

III. NEW INDEPENDENT CLAIMS

New independent claims 34, 39, and 45, and their respective dependent claims, have been added to further define and broaden the invention.

Claim 34 recites a drum having an angular indentation formed on the side wall substantially intermediate the end walls, wherein the indentation is deeper at the corner sections than it is at a point on at least one of the side wall sections intermediate the corner sections. This language is supported by the application as originally filed, at least at FIG. 5, which shows corner indentations 24 (in dashed lines) being deeper at the corner sections than intermediate the corner sections. For clarity, the specification has been amended to explicitly support this claim language. No new matter has been added. None of the references cited disclose, teach or suggest a drum having this feature. Thus, applicants respectfully submit that claim 34, and its dependent claims 35-38, are patentable over the cited references.

Claim 39 recites a drum having an indentation formed on the side wall substantially intermediate the end walls, wherein the indentation defines a vertical thickness that varies around the circumference of the side wall. This language is supported by the application as originally filed, at least at FIG. 6, which shows corner indentations 24 being thickest at the corner sections, and at page 4, lines 19-21, which stated that the angular corner indentations 24 are thickest in the corner areas. For clarity, the specification has been amended to explicitly support this claim language. No new matter has been added. None of the references cited disclose, teach or suggest a drum having this feature. Thus, applicants respectfully submit that claim 39, and its dependent claims 40-44, are patentable over the cited references.

Claim 45 recites a drum having an indentation formed on the side wall substantially intermediate the end walls, wherein the indentation defines a vertical thickness that varies around the circumference of the side wall, and the indentation is deeper at the corner sections than it is at a point on at least one of the side wall sections intermediate the corner sections. Applicants respectfully submit that this claims is patentable over the cited references for at least the same reasons as claims 34 and 39, discussed above.

IV. CONCLUSION

Applicants respectfully submit that all pending claims comply with the requirements of 35 U.S.C. §112 and are allowable over the cited references, whether taken singly or in combination. Accordingly, this application is now in condition for allowance, early notice of which would be appreciated. Should the Examiner not agree that all claims are allowable, then a personal or telephonic interview is respectfully requested to discuss any remaining issues and to accelerate the allowance of the above-identified application.

A fee transmittal sheet is attached for the presentation of the additional claims.
Should any other fees be required, however, please charge such fees to Pennie & Edmonds
LLP deposit account no. 16-1150.

Respectfully submitted,

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APPENDIX A

MARKED-UP SPECIFICATION

Paragraph on page 4, beginning at line 16:

FIG. 5 is a top view of the preferred embodiment of the drum 10. This embodiment of drum 10 has a first portion with a generally square cross-section, and a second portion with a generally round cross-section defined by four angular corner indentations 24 formed in the drum. The angular corner indentations 24 are outlined by the round dashed line. The indentations 24 may be deeper at the corner areas than they are on the side wall sections in between. In addition, as shown in FIG. 6, the indentations 24 define a vertical thickness that varies around the circumference of the side wall, e.g., is greatest [, and are thickest] in the corner areas and transitions into the flat surfaces of the side wall sections in between.

APPENDIX B

MARKED-UP CLAIMS

1. (Amended) A drum comprising:

a side wall comprising a plurality of side wall sections connected by corner sections, the side wall having end portions disposed at longitudinal ends thereof;

first and second end walls located adjacent the end portions, the first end wall defining a fill/drain opening therein;

a circumferential carrying and transport rim disposed on at least one of the end portions and configured for carrying the drum with drum handling equipment; and

a first [protrusion] indentation formed on the side wall substantially intermediate the end portions, the first indentation configured and dimensioned to resist buckling of the side wall, wherein the drum defines a longitudinal axis between the end portions, and the [protrusion] indentation extends substantially circumferentially about the side wall around the longitudinal axis and is substantially V-shaped only at the corner sections.

4. (Amended) The drum of claim 1, wherein the [side wall comprises a plurality of] side wall sections [that] define a substantially [polygonal first] rectangular cross-section of the side wall, and the first indentation defines a substantially circular cross-section of the side wall.

6. (Amended) The drum of claim 1, wherein the drum defines a drum height between the end portions and substantially parallel to the longitudinal axis, and the first [protrusion] indentation is disposed in a plane located at about 30% to about 70% of the drum height.

7. (Amended) The drum of claim 1, wherein the side wall further comprises a second [protrusion] indentation formed thereon, and the second [protrusion] indentation extends substantially in a direction of the longitudinal axis.

10. (Amended) A drum comprising:

a side wall comprising:

a first portion having a plurality of side wall sections that define a first circumferential cross-section,

a second portion comprising angular indentations in the side wall disposed at intersections between the side wall sections defining a second circumferential

cross-section that is different than the first cross-section and configured and dimensioned to resist buckling of the side wall, and

end portions disposed at longitudinal ends of the side wall;

first and second end walls located adjacent the end portions, the first end wall comprising a recessed well; and

a fill/drain opening defined in the recessed well;

wherein the first cross-section is substantially rectangular, and the second cross-section is substantially circular.

13. (Amended) The drum of claim 10, wherein the first cross-section is substantially [polygonal] square.

15. (Amended) The drum of claim 10, wherein the angular indentations are substantially V-shaped and are deepest at the intersections and transition into the side wall sections such that the second cross-section is substantially [annular] circular.

16. (Amended) The drum of claim [10] 15, wherein the [V-shaped] indentations are spaced apart a predetermined distance such that each [V-shaped] indentation does not transition into each adjacent [V-shaped] indentation.

19. (Amended) A drum comprising:

a side wall comprising a first portion having a plurality of side wall sections [of substantially equal length] that define a substantially [polygonal] rectangular first cross-section of the side walls, the side wall having end portions disposed at longitudinal ends thereof;

a protrusion formed in the side wall substantially intermediate the end portions to resist buckling of the side wall, the protrusion defining a substantially circular second cross-section of the side wall;

first and second end walls located adjacent the end portions, the first end wall defining a fill/drain opening; and

a circumferential carrying and transport rim disposed on at least one of the end portions and configured for carrying with drum handling equipment.

23. (Amended) The drum of claim 19, wherein [the at least one wall comprises at least one of the side wall sections, and] the protrusion extends substantially circumferentially.